Image Segmentation and Classification

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Support in different ArcGIS processing frameworks

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Image Classification in Raster Analytics

- REST endpoint
  - https://[Your_ArcGIS_Server]/arcgis/rest/services/System/RasterAnalysisTools/GPServer

- REST API doc

- No UI, yet
Supervised Image Classification

- Input Image
- Segmenter
  - Mean Shift Segmentation
- Segmented Image
- Training Samples
- Classifier
  - Maximum Likelihood
  - Support Vector Machine
  - Random Trees
- Classified Image
- Accuracy assessment

Train .ecd Test/Classify
Demo: Supervised Classification
Supervised Image Classification

Input Image → Segmenter → Segmented Image → Training Samples → Classifier → Classified Image

Generate training & inspect

Training Augmentation

Accuracy assessment

* New in Pro 2.0
Demo:
Training
Augmentation
Unsupervised Image Classification

Input Image → Segmenter → Segmented Image → Classifier → Classified Image

ISOData

Human Labels → Reclassify → Classified Image

Accuracy assessment
Demo:
Unsupervised Classification
Generate training samples from existing source

- Input Image
- Segmenter
- Segmented Image
- Classifier
- Classified Image

- Existing GIS Data
- Generate Training*
- Training Samples

* New in Pro 2.0
Change detection based on image classification

Input Image → Segmenter → Segmented Image → Classifier → Classified Image

Pre Classified Image → Generate Training* → Training Samples → Classified Image

* New in Pro 2.0

Compare and Detect change
Demo: Change Detection Based on Classification
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